

Fig. 1 Tagged frame and untagged frame

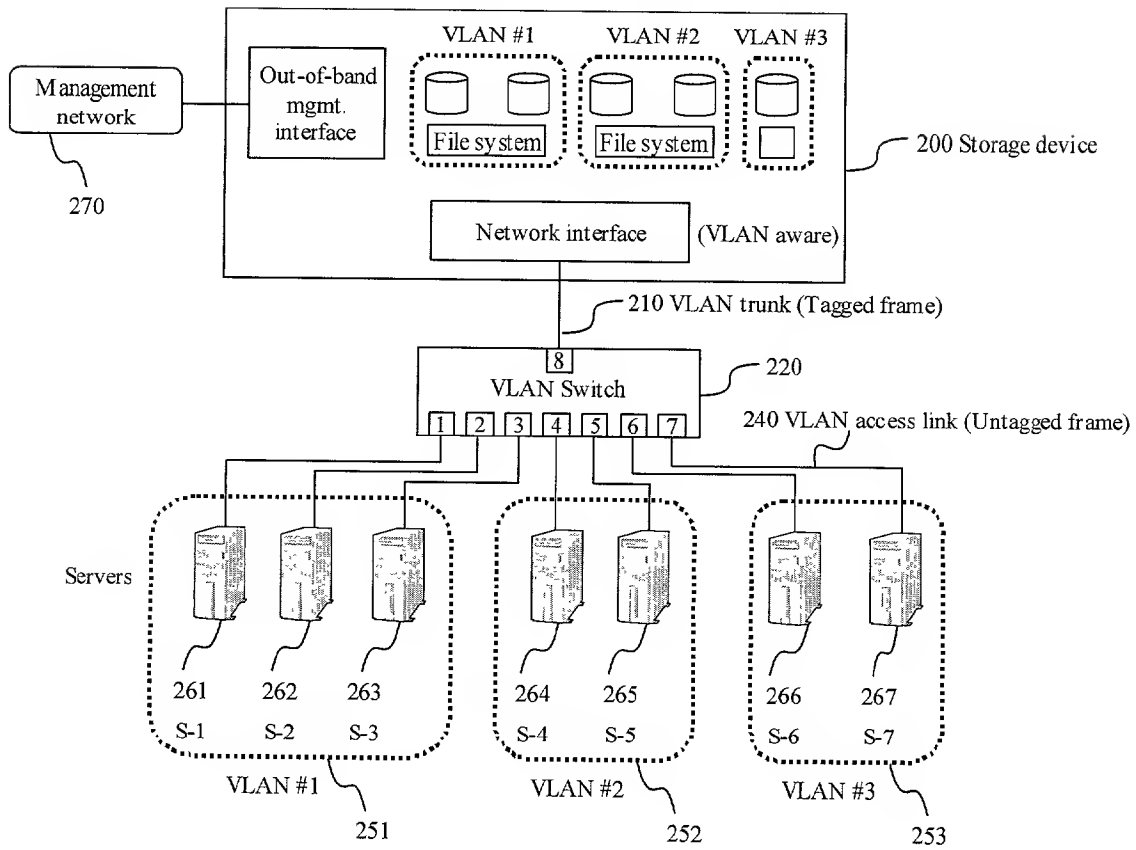


Fig. 2 System configuration

300

Port No	VLAN Trunk	VLAN ID (Tag)	Other switch port attributes
1	No	100	100M/Full duplex
2	No	100	100M/Full duplex
3	No	100	100M/Full duplex
4	No	200	10M/Half duplex
5	No	200	10M/Half duplex
6	No	300	100M/Full duplex
7	No	300	100M/Full duplex
8	Yes	—	1G/Full duplex

Fig. 3 Port-based VLAN switch configuration

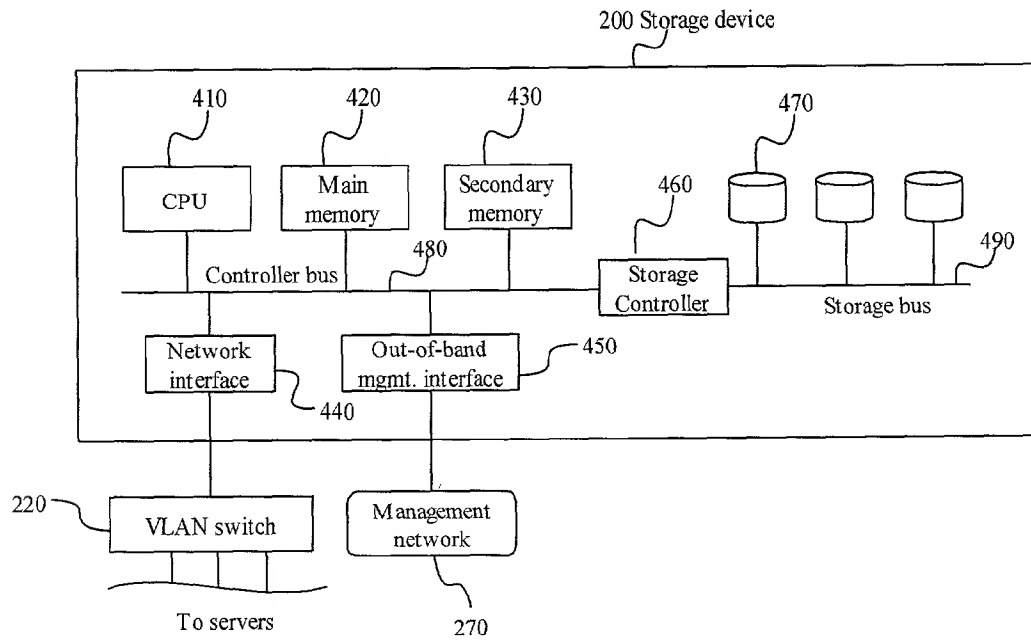


Fig. 4 Hardware configuration

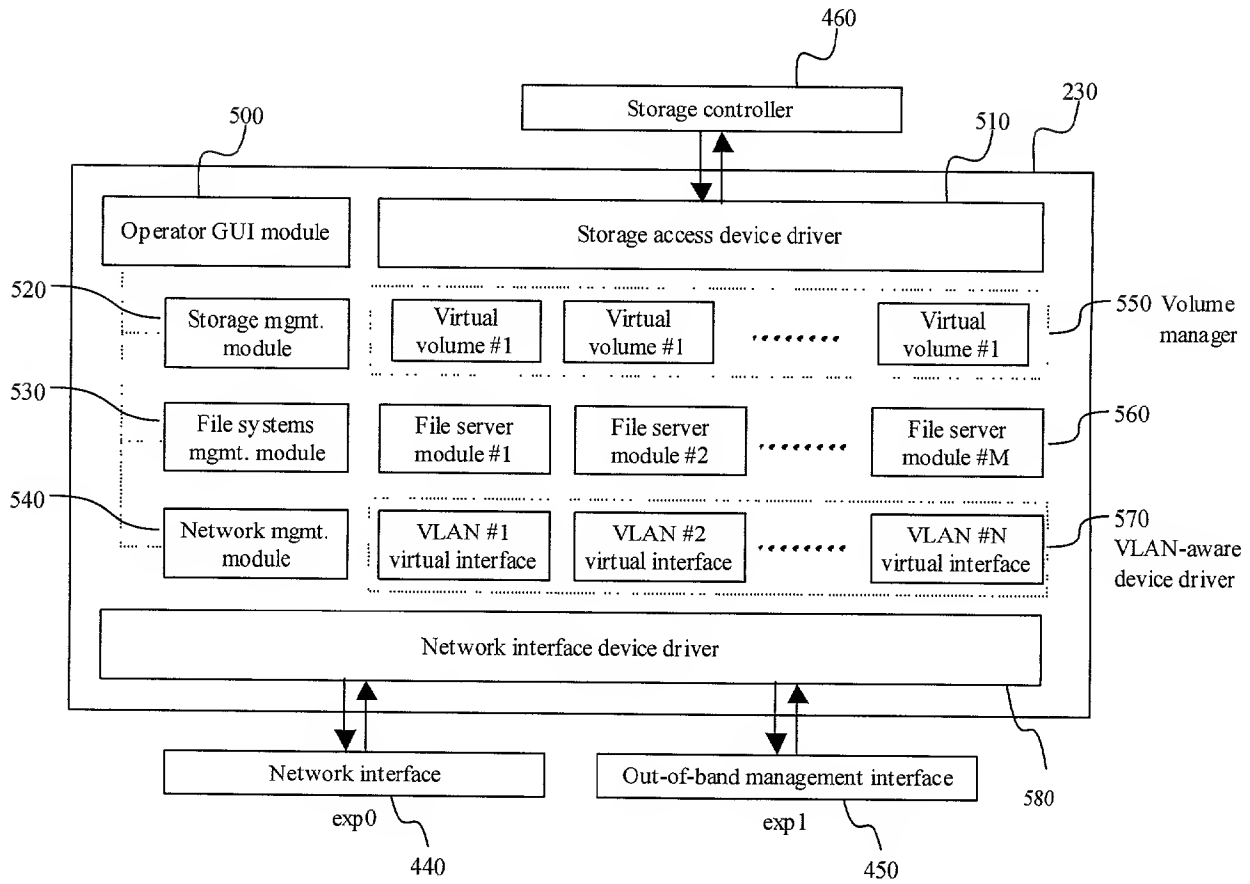


Fig. 5 Software modules

600

Interface no.	Interface name	Physical interface name	VLAN ID (Tag)	IP address	Maximum throughput	Management
1	vlan1	exp0	100	10.0.1.1/24	50Mbps	No
2	vlan2	exp0	200	10.0.2.1/24	5Mbps	No
3	vlan3	exp0	300	10.0.3.1/24	10Mbps	No
4	exp0	exp0	—	10.0.4.1/24	10Mbps	No
5	exp1	exp1	—	192.168.1.1/24	10Mbps	Yes

Fig. 6 Network interface configuration table

Process IDなど

700

Interface no.	File server module	Allowed interfaces	Allowed volumes
1	#1000	vlan1	vol001, vol002
2	#1001	vlan1, vlan2	vol003
3	#1002	vlan2	vol004
4	#1003	vlan3	vol005
5	#1004	exp0	vol005

Fig. 7 File system configuration table

800

Configuration

Network Configuration Configure 810

IP Address 192.168.1.1/24

Add New File System

File System #1 Configure Delete 820

Process ID 1000

VLAN vlan1 (10.0.1.1/24)

Volume vol001 (1.3GB / 2.0GB)
vol002 (0.3GB / 4.0GB)

File System #2 Configure Delete

Process ID 1001

VLAN vlan1 (10.0.1.1/24)
vlan2 (10.0.2.1/24)

Volume vol003 (0.8GB / 20.0GB)

File System #3

Fig. 8 System configuration window

900

Network Configuration									
Network Configuration									
Management Interface									
	IP Address				Throughput				
exp1	192	168	1	1	/	24		10	Update
LAN Interfaces									
	IP Address				Throughput				
exp0	10	0	4	1	/	24		100	Update
	IP Address				Tag				
vlan1	10	0	1	1	/	24	100	10	Update Delete
vlan2	10	0	2	1	/	24	200	50	Update Delete
vlan3	10	0	3	1	/	24	300	30	Update Delete
					/				Add

Fig. 9 Network configuration window

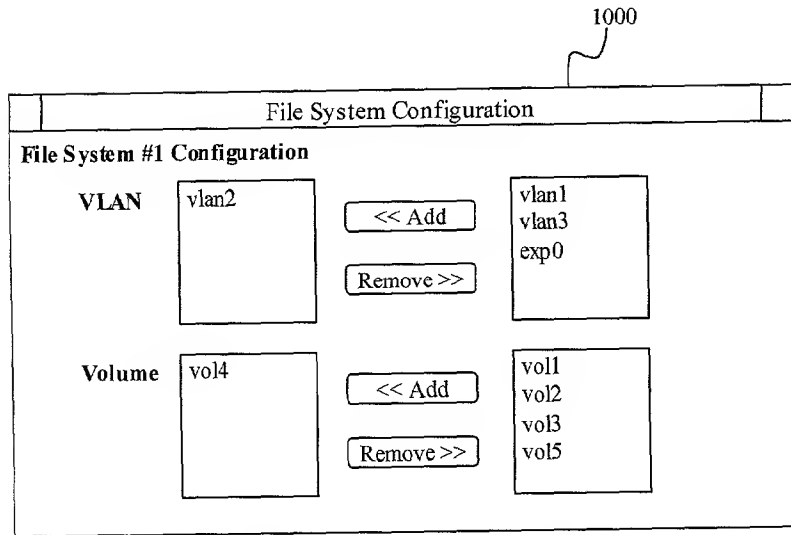


Fig. 10 File system configuration window

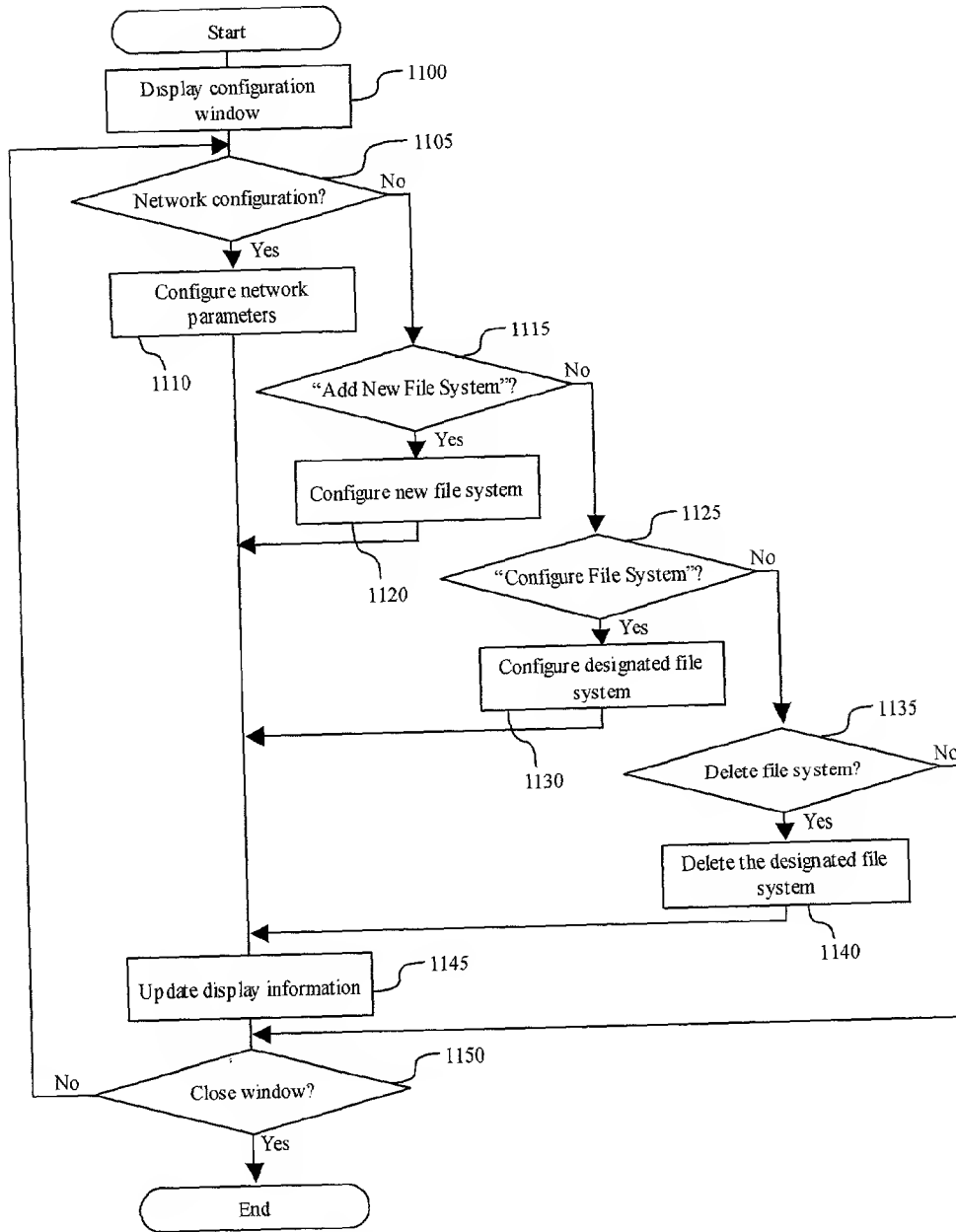


Fig 11 Flowchart of system configuration

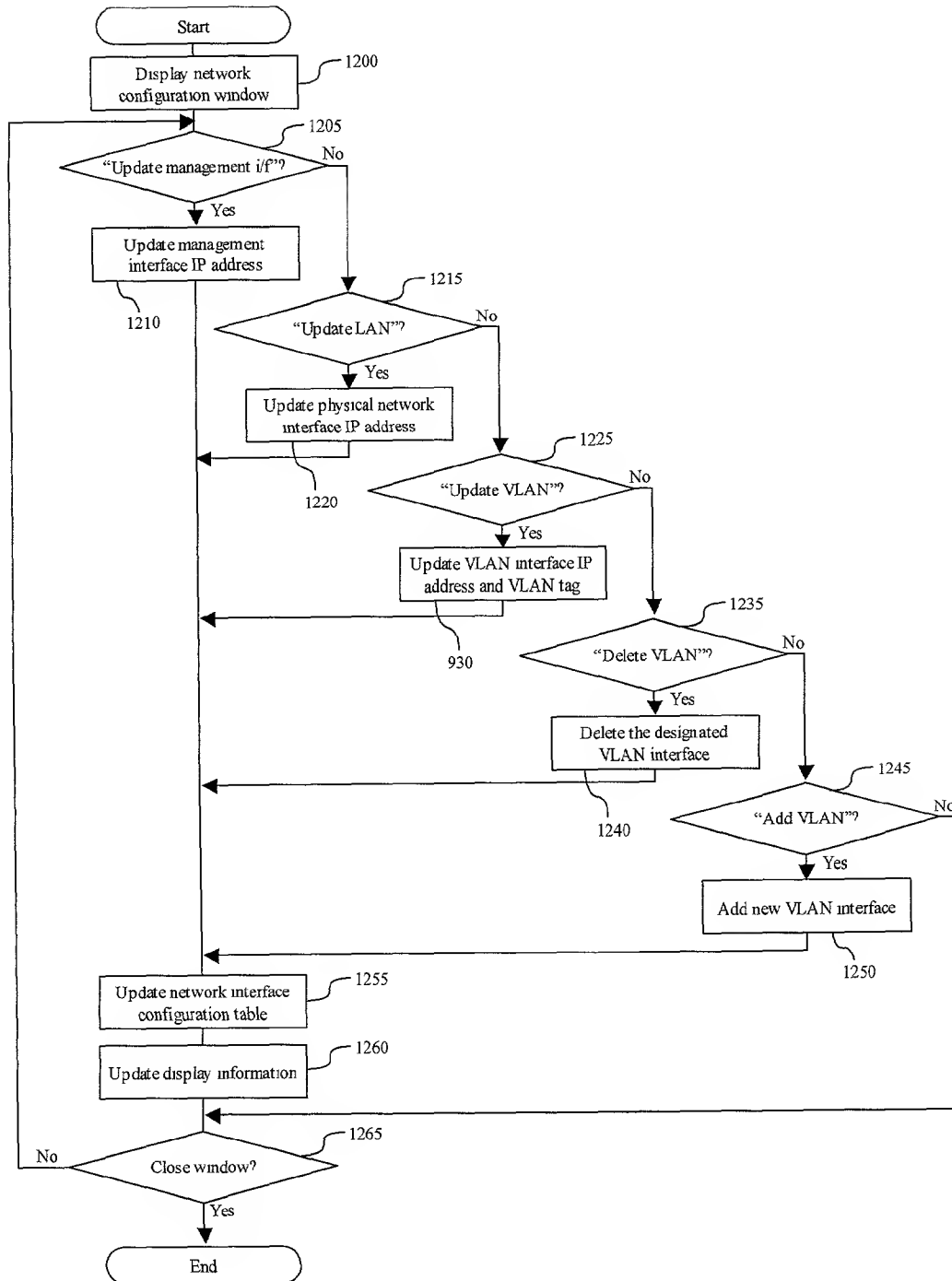


Fig. 12 Flowchart of network configuration

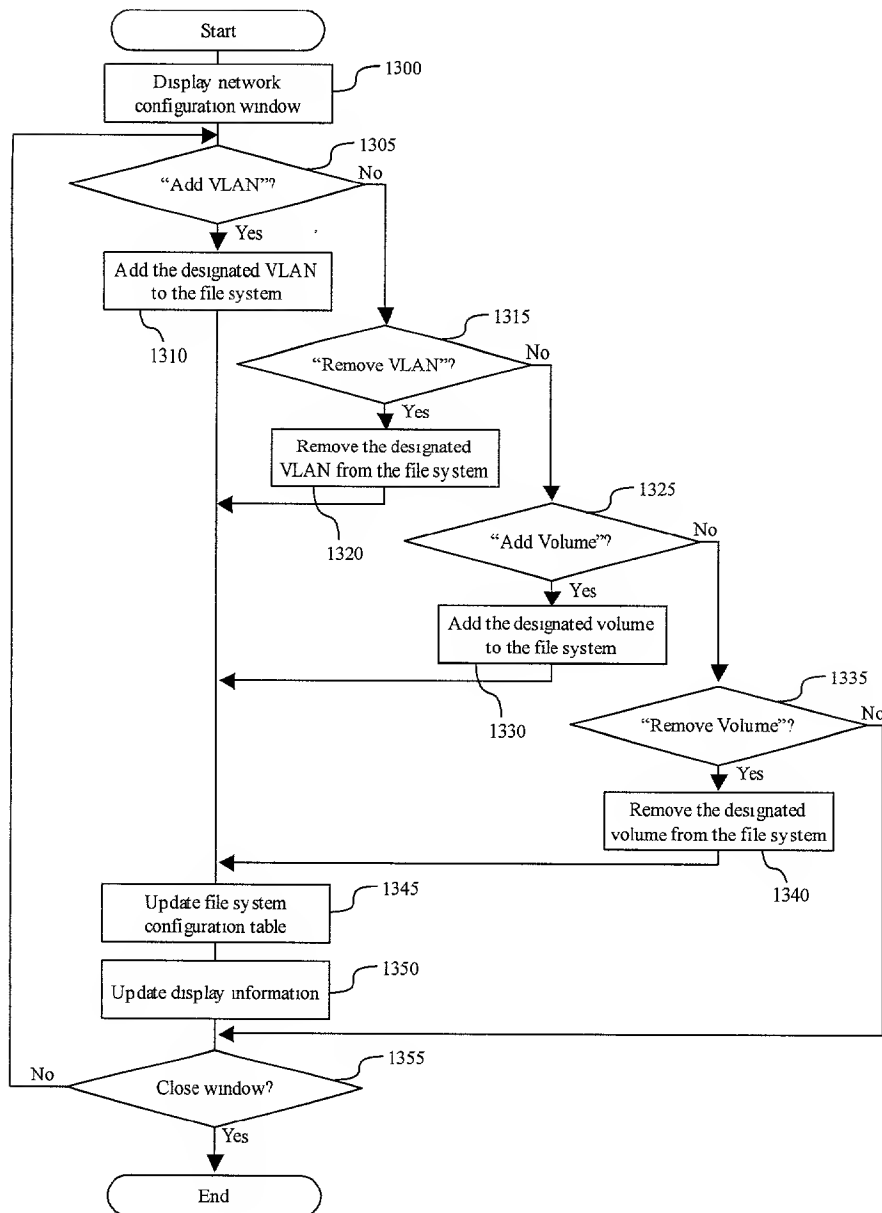


Fig. 13 Flowchart of file system configuration

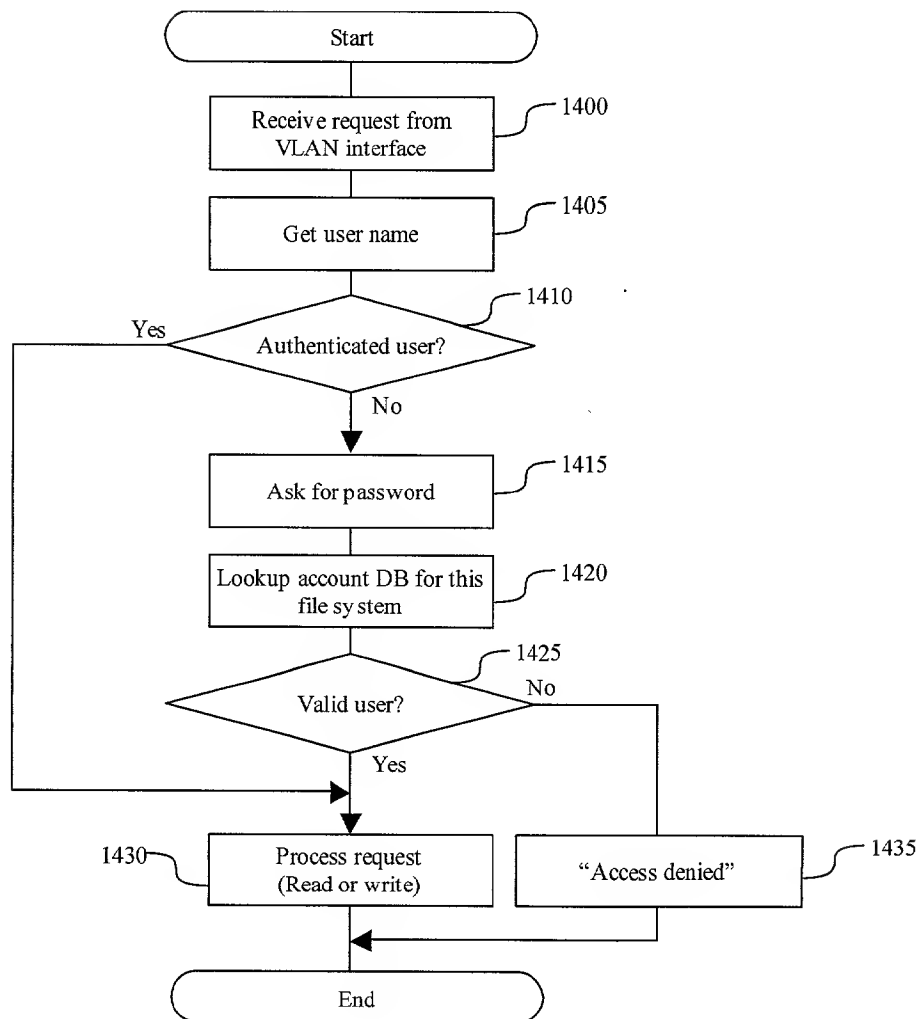


Fig. 14 Flowchart of request processing

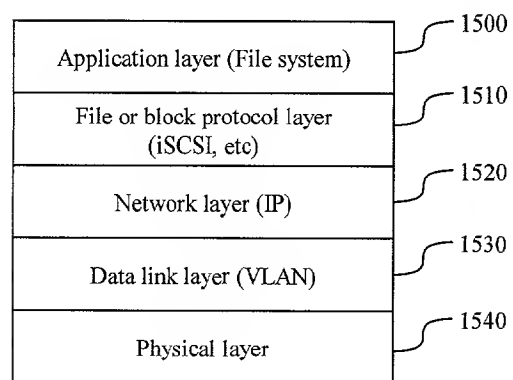


Fig. 15 Protocol stack

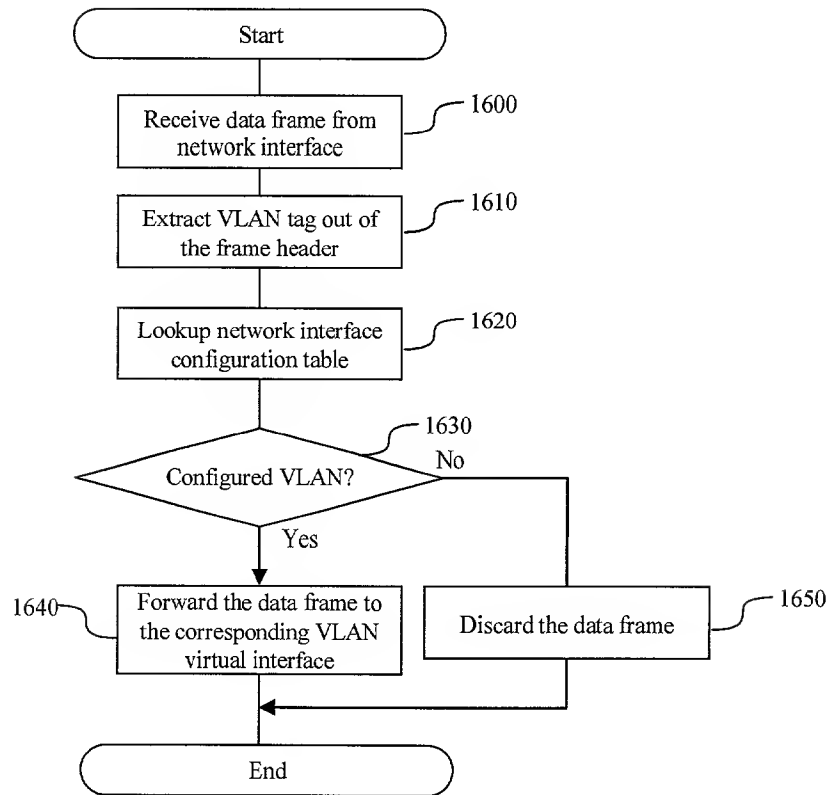


Fig. 16 Flowchart of identification of VLAN membership of received frame